AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-79. (Canceled)

80. (Currently amended) A method for identifying a compound that modulates a ~~heat shock protein (hereinafter "HSP") alpha (2) macroglobulin ("α2M") receptor-mediated~~ process selected from the group consisting of heat shock protein (hereinafter "HSP") binding activity, HSP uptake activity, and HSP-mediated antigen representation activity, comprising:

(a)   contacting a test compound with: (i) a ligand-binding fragment of an alpha (2) macroglobulin (hereinafter "α2M") ~~α2M~~ receptor; and (ii) a purified HSP, or a receptor-binding fragment thereof, or a purified HSP-peptide complex; and

(b)   measuring the level of HSP binding activity, HSP uptake activity, or HSP-mediated antigen representation activity,

such that if the level of HSP binding activity, HSP uptake activity, or HSP-mediated antigen representation activity measured in (b) differs from the level of HSP binding activity, HSP uptake activity, or HSP-mediated antigen representation activity in the absence of the test compound, then a compound that modulates ~~an HSP-α2M receptor-mediated~~ said process is identified.

81. (Previously presented) The method of claim 80 wherein the ligand-binding fragment of the α2M receptor is immobilized to a solid surface.

82. (Canceled)

83. (Currently amended) The method of claim 80 wherein the compound identified is an antagonist that interferes with ~~an HSP-α2M receptor-mediated~~ said process.

84. (Currently amended) The method of claim 80 wherein the ~~HSP-α2M receptor-mediated~~ process affects diabetes or other autoimmune disorder, a disease or disorder involving disruption of antigen presentation or endocytosis, a disease or disorder involving cytokine clearance or inflammation, a proliferative disorder, a viral disorder or other infectious disease, hypercholesterolemia, Alzheimer's disease, or osteoporosis.

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85. (Withdrawn) The method of claim 80 wherein the test compound is an antibody specific for the α2M receptor.

86. (Withdrawn) The method of claim 80 wherein the test compound is an antibody specific for α2M.

87. (Withdrawn) The method of claim 80 wherein the test compound is an antibody specific for an HSP.

88. (Previously presented) The method of claim 80 wherein the test compound is a small molecule.

89. (Withdrawn) The method of claim 80 wherein the test compound is a peptide.

90. (Withdrawn) The method of claim 89 wherein the peptide comprises at least 5 consecutive amino acids of α2M (SEQ ID NO.: 4).

91. (Withdrawn - currently amended) The method of claim 89 wherein the peptide comprises at least 5 consecutive amino acids of an HSP-sequence.

92. (Withdrawn) The method of claim 89 wherein the peptide comprises at least 5 consecutive amino acids of the α2M receptor (SEQ ID NO.: 7).

93. (Canceled)

94. (Previously presented) The method of claim 80 wherein the activity measured is HSP binding activity.

95. (Currently amended) The method of claim 94 wherein the HSP, or receptor-binding fragment thereof, is labeled and contacted with said test compound in step (a), and the amount of bound HSP, or receptor-binding fragment thereof, is measured by detecting the label.

96. (Currently amended) The method of claim 94 wherein measuring the level of HSP binding activity of step (b) comprises measuring the amount of HSP, or receptor binding fragment thereof, bound to the ligand-binding fragment of the α2M receptor, such that if the amount of bound HSP, or receptor-binding fragment thereof, measured in (b) differs from the amount of bound HSP, or receptor-binding fragment thereof, measured in the absence of the

test compound, then a compound that modulates the binding of an HSP to the α2M receptor is identified.

97-103. (Canceled)

104. (Previously presented) The method of claim 80 wherein the ligand-binding fragment of the α2M receptor is purified.

105. (Previously presented) The method of claim 80 wherein HSP uptake activity is measured.

106. (Previously presented) The method of claim 80 wherein HSP-mediated antigen representation activity is measured.

107. (Canceled)

108. (Canceled)

109. (Previously presented) The method of claim 80 wherein the ligand-binding fragment of the α2M receptor comprises a cluster of complement repeats.

110. (Previously presented) The method of claim 109 wherein the cluster of complement repeats comprises the CI-CII complement repeat cluster of the α2M receptor.

111. (Previously presented) The method of claim 80 wherein the ligand-binding fragment of the α2M receptor comprises the p80 fragment of the α2M receptor.

112. (Currently amended) The method of claim 80 wherein the ligand-binding fragment of the α2M receptor is a peptide consisting of ~~amino acids of the human α2M receptor:~~ amino acid nos. 25-110 (SEQ ID NO:21) of the human α2M receptor.

113. (Previously presented) The method of claim 109 wherein at least one complement repeat is selected from the group consisting of CR3 to CR10.

114. (Previously presented) The method of claim 80, wherein the HSP is hsp90.

115. (Previously presented) The method of claim 80, wherein the HSP is gp96.

116. (Previously presented) The method of claim 80, wherein the HSP is hsp70.

117. (Previously presented) The method of claim 80, wherein the HSP is calreticulin.

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